

Could the crime involve

land use?

These activities will give you and your group some valuable information which might help you when solving the crime.



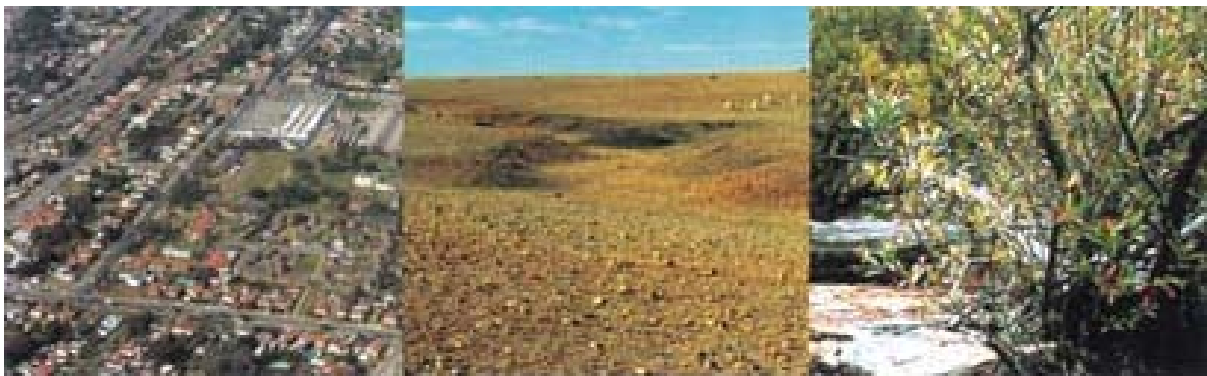
Look for and collect articles relating to land use. These might show how widespread and serious land use issues can be.

How do we use the land?

Brainstorming



Brainstorm a list of things that humans do to make use of the land.



When you have made your list, categorise the uses under four headings:

Urbanisation

Agriculture

Forestry

Mining

What does each land use activity involve?

Internet research



Choose one of the categories from the previous activity. Using the internet, newspapers and other sources of information, find out about more about the land use involved. For example, if you were investigating urbanisation you may have a list that looks like this:

Urbanisation

- Houses
- Factories
- Roads
- Schools
- Shopping centres
- Sports grounds
- Sewage treatment

Try to think of more things we do when we urbanise. Add these to your list. Then choose one item on the list and draw up a consequences chart to show what effect the activity might have on our waterways. Here's an example for building a house:

- Clear the land of trees and grass.
- Lay foundation.
- Bring in building materials including concrete.
- Lay pipes for sewage and drainage.
- Build house.
- Build swimming pool.
- Plant garden.



Exposed soil washes away during rain → erosion

Foundations and pool cover ground → fewer places for stormwater to escape

Pipes take some stormwater → less water going into soil

Fewer mature trees → water table changed

When you have completed your consequences chart, share it with those in your group.

So humans use land. What about waterways?



Here are two ways that humans use the waterways. Think and make notes about the other ways that humans use the waterways for recreation, for living and for transport. What effect would these uses of the waterways have?



Choose one use and describe in a paragraph how that use will affect the waterways.

Are there any solutions to the problems we create?



Internet research



There are ways we can minimise the effect we have on the waterways. This picture shows how one sewage treatment works is using the natural filtration of a wetland to reduce the amount of nutrients in the water before it reaches the river. Using the internet, newspapers and other sources of information suggest how we can reduce our impact on the waterways.

Activity



Be prepared! You will need to spend time collecting the materials required for the following experiments.

These activities appear on the Queensland Government Natural Resources and Water website.

www.nrw.qld.gov.au/education/teachers/land/resources/sheet_01.pdf

1. Demonstration of raindrop splash on bare soil.
2. Demonstration of the effects of running water on exposed soil.



Sharing information

What have you found out that might help you understand the crime? Share this information with the other groups. Find a way to explain how our land use affects our waterways. You could use labelled diagrams to help you.